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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/828,802	04/20/2004	Erin N. Rosskopf	0022.03	5070

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EXAMINER	
STITZEL, DAVID PAUL	
ART UNIT	PAPER NUMBER
1616	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/28/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/828,802	ROSSKOPF ET AL.	
	Examiner	Art Unit	
	David P. Stitzel, Esq.	1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 November 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,9-13,15 and 18-21* is/are pending in the application.

4a) Of the above claim(s) *3-8,14,16 and 17* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,9-13,15 and 18-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

OFFICIAL ACTION

Acknowledgment of Receipt

Receipt of the Applicants' Response, which was filed on November 24, 2006, in response to the Official Action dated November 15, 2006, is acknowledged.

Status of Claims

Claims 3-8, 14, 16 and 17 were withdrawn from further consideration as being directed to non-elected species and subspecies. Claims 18-21 were added by the aforementioned Amendment. As a result, claims 1, 2, 9-13, 15 and 18-21 are therefore examined herein on the merits for patentability.

Claim Rejections - 35 U.S.C. § 103

The following is a quotation of the appropriate paragraph of 35 U.S.C. § 103, which forms the basis of the obviousness rejections as set forth under this particular section of the Official Action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. § 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

1. The rejection of claims 1, 2, 9-13 and 15 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 3,975,181 (the Watanabe '181 patent) in view of East German Patent Application Publication DD257379A (the Bergmann '379 publication) is hereby withdrawn in light of the acknowledged typographical error associated with the previously relied upon Derwent abstract of the Bergmann '379 publication.

2. Claims 1, 2, 9, 11-13, 15 and 18-21 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 2,622,976 (the Hitchcock '976 patent) in view of East German Patent Application Publication DD257379A (the Bergmann '379 publication).

With respect to claims 1, 2, 9, 11-13, 15 and 18-21 of the instant application, the Hitchcock '976 patent teaches a method of defoliating and/or killing weeds comprising, consisting essentially of, and/or consisting of: applying an effective herbicidal amount, namely from about 20 pounds/acre to about 40 pounds/acre, of chloroacetic acid directly to soil either prior to the planting of crop seeds, or the pre-emergence of said weeds and said planted crops, and/or directly to said weeds or said planted crops post-emergence (columns 1-4).

The Hitchcock '976 patent does not explicitly teach utilizing bromoacetic acid as said herbicide as instantly claimed.

However, the Bergmann '379 publication teaches a method of killing plants and parts thereof comprising applying to said plants and parts thereof an herbicidal composition comprising: a monohalogenated acetic acid, such as chloroacetic acid, or iodoacetic acid (abstract; page 2, lines 2, 3 and 11; page 3, line 3; page 4, lines 6-8; page 5, line 8; page 6, line 7; page 8, lines 3 and 4; page 10, line 21).

Although neither the Hitchcock '976 patent, nor the Bergmann '379 publication explicitly teach utilizing bromoacetic acid as said herbicide, it would have been prima facie obvious to one of ordinary skill in the art at the time the instant application was filed to modify the method of the Hitchcock '976 patent by substituting other monohalogenated acetic acids (i.e., fluoroacetic acid, bromoacetic acid, and/or iodoacetic acid) in place of chloroacetic acid, because one of ordinary skill in the art would immediately envisage bromoacetic acid as being a particular species within the extremely small genus of monohalogenated acetic acids taught in the Bergmann '379 publication. See *In re Petering*, 133 USPQ 275, 280 (CCPA 1962). One of ordinary skill in the art at the time the instant application was filed would have been motivated to substitute bromoacetic acid in place of chloroacetic acid, because the Bergmann '379 publication reasonably teaches the interchangeability of monohalogenated acetic acids, which include fluoroacetic acid, chloroacetic acid, bromoacetic acid, and iodoacetic acid, for utilization as a herbicide. See § MPEP 2144.08. One of ordinary skill in the art at the time the instant application was filed would have had a reasonable expectation of success in substituting bromoacetic acid in place of chloroacetic acid, because bromoacetic acid would reasonably be expected to possess similar physicochemical properties to those of chloroacetic acid due to their substantial structural similarities. See *In re Dillon*, 16 USPQ2d 1867, 1901, 1904 (Fed. Cir. 1990).

3. Claim 10 is rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 2,622,976 (the Hitchcock '976 patent) in view of East German Patent Application Publication DD257379A (the Bergmann '379 publication) and U.S. Patent 3,975,181 (the Watanabe '181 patent).

The teachings of the Hitchcock '976 patent and the Bergmann '379 publication are incorporated herein by reference and are therefore applied in the instant rejection as discussed hereinabove.

With respect to claim 10 of the instant application, neither the Hitchcock '976 patent, nor the Bergmann '379 publication explicitly teach that said weed is nutsedge of the species *Cyperus rotundus*.

However, the Watanabe '181 patent teaches a method of combating weeds including various species of sedge within the genus *Cyperus* comprising applying an effective amount of chloroacetic acid as a phytotoxicity agent to said weeds, cultivated crop plants, and/or soil (abstract; columns 1-3). As discussed heretofore, it would have been prima facie obvious to one of ordinary skill in the art at the time the instant application was filed to substitute bromoacetic acid in place of chloroacetic acid. Since the Watanabe '181 patent explicitly teaches utilizing chloroacetic acid for combating weeds including various species of sedge within the genus *Cyperus*, one of ordinary skill in the art would have been motivated at the time the instant application was filed to utilize bromoacetic acid as a phytotoxicity agent for combating various species of sedge within the genus *Cyperus*, which intrinsically includes nutsedge of the species *Cyperus rotundus*.

Examiner's Response to Applicant's Remarks

Although Applicants' arguments as set forth in the aforementioned Response have been fully considered, they are moot in view of the new grounds of rejection as set forth hereinabove.

Conclusion

Claims 1, 2, 9-13, 15 and 18-21 are rejected because the claimed invention would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made since each and every element of the claimed invention, as a whole, would have been reasonably suggested by the teachings of the cited prior art references. Because new grounds of rejection are presented hereinabove, this Official Action is made **NON-FINAL**.

Contact Information

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to David P. Stitzel, M.S., Esq., whose telephone number is 571-272-8508. The Examiner can normally be reached on Monday-Friday, from 7:30AM-6:00PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Mr. Johann Richter, Ph.D., Esq., can be reached at 571-272-0646. The central fax number for the USPTO is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published patent applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished patent applications is only available through Private PAIR. For more information about the PAIR system, please see http://pair-direct.uspto.gov. Should you have questions about acquiring access to the Private PAIR system, please contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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